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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/579,293	BOSTICA ET AL.
	Examiner	Art Unit	
	ADAM DUDA	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *38-74* is/are pending in the application.

    4a) Of the above claim(s) *1-37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *38-74* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 May 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☒ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/03/2007 1/03/2007 5/15/2006*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

2.   Regarding claims 38, 45, 46, 55, 62, 63, 64, 73, and 74, the phrase **"capable of"**

renders the claim indefinite because it is unclear whether the limitations following the

phrase are part of the claimed invention. See MPEP § 2173.05(d).

3.   Regarding claims 38 and 55, the phrase **"can be"** renders the claim indefinite

because it is unclear whether the limitation(s) following the phrase are part of the

claimed invention. See MPEP § 2173.05(d).

4.   Regarding claims 38 the phrase **"being able to"** renders the claim indefinite

because it is unclear whether the limitations following the phrase are part of the claimed

invention. See MPEP § 2173.05(d).

5.   Regarding claims 41 and 58 the phrase **"some of"** renders the claim indefinite

because it is unclear whether the limitations following the phrase are part of the claimed

invention. See MPEP § 2173.05(d).

6.   Claim 38 recites the limitation "the application". There is insufficient antecedent basis for this limitation in the claim.

7.   Claim 38 recites the limitation "said network". There is insufficient antecedent basis for this limitation in the claim.

8.   Claim 38 recites the limitation "the operating conditions". There is insufficient antecedent basis for this limitation in the claim.

9.   Claim 38 recites the limitation "the network". There is insufficient antecedent basis for this limitation in the claim.

10.   Claim 38 recites the limitation "respective sub0sets". There is insufficient antecedent basis for this limitation in the claim.

11.   Claim 38 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

12.   Claim 38 recites the limitation "said related sub-sets". There is insufficient antecedent basis for this limitation in the claim.

13.   Claim 39 recites the limitation "the collection of measurement data". There is insufficient antecedent basis for this limitation in the claim.

14.   Claim 39 recites the limitation "said measurement data" (all occurrences). There is insufficient antecedent basis for this limitation in the claim.

15.   Claim 40 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

16.   Claim 40 recites the limitation "said set". There is insufficient antecedent basis
for this limitation in the claim.

17.   Claim 40 recites the limitation "the terminals". There is insufficient antecedent
basis for this limitation in the claim.

18.   Claim 41 recites the limitation "the terminals". There is insufficient antecedent
basis for this limitation in the claim.

19.   Claim 42 recites the limitation "said network". There is insufficient antecedent
basis for this limitation in the claim.

20.   Claim 42 recites the limitation "the processing conditions". There is insufficient
antecedent basis for this limitation in the claim.

21.   Claim 42 recites the limitation "the transfer". There is insufficient antecedent
basis for this limitation in the claim.

22.   Claim 42 recites the limitation "the measurement results". There is insufficient
antecedent basis for this limitation in the claim.

23.   Claim 42 recites the limitation "said at least an additional subsystem". There is
insufficient antecedent basis for this limitation in the claim.

24.   Claim 42 recites the limitation "said at least an additional subsystem". There is
insufficient antecedent basis for this limitation in the claim.

25.   Claim 42 recites the limitation "the collection". There is insufficient antecedent
basis for this limitation in the claim.

26.   Claim 42 recites the limitation "the measurement data". There is insufficient

antecedent basis for this limitation in the claim.

27.   Claim 43 recites the limitation "the quality and operating conditions". There is

insufficient antecedent basis for this limitation in the claim.

28.   Claim 43 recites the limitation "the radio access". There is insufficient

antecedent basis for this limitation in the claim.

29.   Claim 43 recites the limitation "the application layer". There is insufficient

antecedent basis for this limitation in the claim.

30.   Claim 43 recites the limitation "the operating conditions". There is insufficient

antecedent basis for this limitation in the claim.

31.   Claim 43 recites the limitation "the resources". There is insufficient antecedent

basis for this limitation in the claim.

32.   Claim 43 recites the limitation "said terminals". There is insufficient antecedent

basis for this limitation in the claim.

33.   Claim 43 recites the limitation "said network". There is insufficient antecedent

basis for this limitation in the claim.

34.   Claim 44 recites the limitation "the terminal". There is insufficient antecedent

basis for this limitation in the claim.

35.   Claim 44 recites the limitation "the network". There is insufficient antecedent

basis for this limitation in the claim.

36.   Claim 44 recites the limitation "the monitoring". There is insufficient antecedent basis for this limitation in the claim.

37.   Claim 44 recites the limitation "the load state measured". There is insufficient antecedent basis for this limitation in the claim.

38.   Claim 45 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

39.   Claim 46 recites the limitation "the collection of the measurement data". There is insufficient antecedent basis for this limitation in the claim.

40.   Claim 48 recites the limitation "said additional subsystem for managing". There is insufficient antecedent basis for this limitation in the claim.

41.   Claim 48 recites the limitation "the collection of the measurement data". There is insufficient antecedent basis for this limitation in the claim.

42.   Claim 48 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

43.   Claim 48 recites the limitation "said set". There is insufficient antecedent basis for this limitation in the claim.

44.   Claim 49 recites the limitation "said additional subsystem for managing". There

is insufficient antecedent basis for this limitation in the claim.

45.   Claim 49 recites the limitation "the collection of the measurement data". There is

insufficient antecedent basis for this limitation in the claim.

46.   Claim 50 recites the limitation "the terminals". There is insufficient antecedent

basis for this limitation in the claim.

47.   Claim 50 recites the limitation "said set". There is insufficient antecedent basis

for this limitation in the claim.

48.   Claim 50 recites the limitation "the direct transfer". There is insufficient

antecedent basis for this limitation in the claim.

49.   Claim 50 recites the limitation "said measurement data". There is insufficient

antecedent basis for this limitation in the claim.

50.   Claim 50 recites the limitation "said additional sub-system for managing". There

is insufficient antecedent basis for this limitation in the claim.

51.   Claim 50 recites the limitation "the collection of the measurement data". There is

insufficient antecedent basis for this limitation in the claim.

52.   Claim 52 recites the limitation "said homologous agents". There is insufficient

antecedent basis for this limitation in the claim.

53.   Claim 53 recites the limitation "the identifying characteristics". There is insufficient antecedent basis for this limitation in the claim.

54.   Claim 53 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

55.   Claim 53 recites the limitation "said campaign". There is insufficient antecedent basis for this limitation in the claim.

56.   Claim 53 recites the limitation "the measurements". There is insufficient antecedent basis for this limitation in the claim.

57.   Claim 53 recites the limitation "the quality of service indicators". There is insufficient antecedent basis for this limitation in the claim.

58.   Claim 53 recites the limitation "the characteristics". There is insufficient antecedent basis for this limitation in the claim.

59.   Claim 53 recites the limitation "the contextual information". There is insufficient antecedent basis for this limitation in the claim.

60.   Claim 54 recites the limitation "said respective sub-sets". There is insufficient antecedent basis for this limitation in the claim.

61.   Claim 54 recites the limitation "said set of terminals". There is insufficient antecedent basis for this limitation in the claim.

62.   Claim 54 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

63.   Claim 54 recites the limitation "the identifying characteristics". There is insufficient antecedent basis for this limitation in the claim.

64.   Claim 54 recites the limitation "the measurement campaign". There is insufficient antecedent basis for this limitation in the claim.

65.   Claim 54 recites the limitation "said terminals". There is insufficient antecedent basis for this limitation in the claim.

66.   Claim 54 recites the limitation "the information". There is insufficient antecedent basis for this limitation in the claim.

67.   Claim 54 recites the limitation "the said measurements". There is insufficient antecedent basis for this limitation in the claim.

68.   Claim 54 recites the limitation "the campaign". There is insufficient antecedent basis for this limitation in the claim.

69.   Claim 54 recites the limitation "the involved terminals". There is insufficient antecedent basis for this limitation in the claim.

70.   Claim 54 recites the limitation "the measurement information". There is insufficient antecedent basis for this limitation in the claim.

71.   Claim 54 recites the limitation "the relevant characteristics". There is insufficient antecedent basis for this limitation in the claim.

72.   Claim 54 recites the limitation "the purpose of the measurements". There is insufficient antecedent basis for this limitation in the claim.

73.   Claim 54 recites the limitation "the purpose of a determined measurement campaign". There is insufficient antecedent basis for this limitation in the claim.

74.   Claim 55 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

75.   Claim 55 recites the limitation "said set measuring agents". There is insufficient antecedent basis for this limitation in the claim.

76.   Claim 55 recites the limitation "the application sessions". There is insufficient antecedent basis for this limitation in the claim.

77.   Claim 55 recites the limitation "said network". There is insufficient antecedent basis for this limitation in the claim.

78.   Claim 55 recites the limitation "the operating conditions". There is insufficient antecedent basis for this limitation in the claim.

79.   Claim 55 recites the limitation "the network". There is insufficient antecedent basis for this limitation in the claim.

80.   Claim 55 recites the limitation "the measurement campaign". There is insufficient antecedent basis for this limitation in the claim.

81.   Claim 55 recites the limitation "the purpose of the execution". There is insufficient antecedent basis for this limitation in the claim.

82.   Claim 55 recites the limitation "the execution". There is insufficient antecedent basis for this limitation in the claim.

83.   Claim 55 recites the limitation "the purpose". There is insufficient antecedent basis for this limitation in the claim.

84.   Claim 55 recites the limitation "the measuring agents". There is insufficient antecedent basis for this limitation in the claim.

85.   Claim 55 recites the limitation "said respective sub-sets". There is insufficient antecedent basis for this limitation in the claim.

86.   Claim 56 recites the limitation "the collection of measurement data". There is insufficient antecedent basis for this limitation in the claim.

87.   Claim 56 recites the limitation "said measurement data". There is insufficient antecedent basis for this limitation in the claim.

88.   Claim 57 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

89.   Claim 58 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

90.   Claim 58 recites the limitation "said set as mobile terminals". There is insufficient antecedent basis for this limitation in the claim.

91.   Claim 59 recites the limitation "the processing conditions". There is insufficient antecedent basis for this limitation in the claim.

92.   Claim 59 recites the limitation "said network". There is insufficient antecedent basis for this limitation in the claim.

93.   Claim 59 recites the limitation "the transfer". There is insufficient antecedent

basis for this limitation in the claim.

94.   Claim 59 recites the limitation "the measurement results". There is insufficient

antecedent basis for this limitation in the claim.

95.   Claim 59 recites the limitation "the collection of the measurement data". There is

insufficient antecedent basis for this limitation in the claim.

96.   Claim 60 recites the limitation "the quality and operating conditions". There is

insufficient antecedent basis for this limitation in the claim.

97.   Claim 60 recites the limitation "the radio access". There is insufficient

antecedent basis for this limitation in the claim.

98.   Claim 60 recites the limitation "said terminals". There is insufficient antecedent

basis for this limitation in the claim.

99.   Claim 60 recites the limitation "the production of quality of service indicators".

There is insufficient antecedent basis for this limitation in the claim.

100.   Claim 60 recites the limitation "the application layer". There is insufficient

antecedent basis for this limitation in the claim.

101.   Claim 60 recites the limitation "the operating conditions". There is insufficient

antecedent basis for this limitation in the claim.

102.   Claim 60 recites the limitation "the resources". There is insufficient antecedent

basis for this limitation in the claim.

103.   Claim 60 recites the limitation "said network". There is insufficient antecedent basis for this limitation in the claim.

104.   Claim 61 recites the limitation "said measuring agents". There is insufficient antecedent basis for this limitation in the claim.

105.   Claim 61 recites the limitation "the load state". There is insufficient antecedent basis for this limitation in the claim.

106.   Claim 61 recites the limitation "the terminal". There is insufficient antecedent basis for this limitation in the claim.

107.   Claim 61 recites the limitation "the network". There is insufficient antecedent basis for this limitation in the claim.

108.   Claim 61 recites the limitation "the monitoring". There is insufficient antecedent basis for this limitation in the claim.

109.   Claim 61 recites the limitation "the measured load state". There is insufficient antecedent basis for this limitation in the claim.

110.   Claim 62 recites the limitation "the management and configuration". There is insufficient antecedent basis for this limitation in the claim.

111.   Claim 62 recites the limitation "the measurement campaigns". There is insufficient antecedent basis for this limitation in the claim.

112.   Claim 62 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

113.   Claim 62 recites the limitation "the set". There is insufficient antecedent basis for this limitation in the claim.

114.   Claim 63 recites the limitation "the management and configuration". There is insufficient antecedent basis for this limitation in the claim.

115.   Claim 63 recites the limitation "the measurement campaigns". There is insufficient antecedent basis for this limitation in the claim.

116.   Claim 63 recites the limitation "the collection". There is insufficient antecedent basis for this limitation in the claim.

117.   Claim 63 recites the limitation "the measurement data". There is insufficient antecedent basis for this limitation in the claim.

118.   Claim 63 recites the limitation "said subsystem for the management and configuration". There is insufficient antecedent basis for this limitation in the claim.

119.   Claim 63 recites the limitation "the measurement campaigns". There is insufficient antecedent basis for this limitation in the claim.

120.   Claim 64 recites the limitation "the management and configuration". There is insufficient antecedent basis for this limitation in the claim.

121.   Claim 64 recites the limitation "the measurement campaigns". There is insufficient antecedent basis for this limitation in the claim.

122.   Claim 65 recites the limitation "the collection of the measurement data". There is insufficient antecedent basis for this limitation in the claim.

123.   Claim 65 recites the limitation "said measuring agents". There is insufficient antecedent basis for this limitation in the claim.

124.   Claim 65 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

125.   Claim 65 recites the limitation "said set". There is insufficient antecedent basis for this limitation in the claim.

126.   Claim 66 recites the limitation "the collection". There is insufficient antecedent basis for this limitation in the claim.

127.   Claim 66 recites the limitation "the measurement data". There is insufficient antecedent basis for this limitation in the claim.

128.   Claim 67 recites the limitation "the collection". There is insufficient antecedent basis for this limitation in the claim.

129.   Claim 67 recites the limitation "the measurement data". There is insufficient antecedent basis for this limitation in the claim.

130.   Claim 67 recites the limitation "said measuring agents". There is insufficient antecedent basis for this limitation in the claim.

131.   Claim 67 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

132.   Claim 67 recites the limitation "said set". There is insufficient antecedent basis for this limitation in the claim.

133.   Claim 67 recites the limitation "the direct transfer". There is insufficient antecedent basis for this limitation in the claim.

134.   Claim 67 recites the limitation "said measurement data". There is insufficient antecedent basis for this limitation in the claim.

135.   Claim 69 recites the limitation "said measuring agents". There is insufficient antecedent basis for this limitation in the claim.

136.   Claim 69 recites the limitation "said homologous agents". There is insufficient antecedent basis for this limitation in the claim.

137.   Claim 70 recites the limitation "the identifying characteristics". There is insufficient antecedent basis for this limitation in the claim.

138.   Claim 70 recites the limitation "the terminals". There is insufficient antecedent basis for this limitation in the claim.

139.   Claim 70 recites the limitation "said campaign". There is insufficient antecedent basis for this limitation in the claim.

140.   Claim 70 recites the limitation "the measurements". There is insufficient antecedent basis for this limitation in the claim.

141.   Claim 70 recites the limitation "the quality of service indicators". There is insufficient antecedent basis for this limitation in the claim.

142.   Claim 70 recites the limitation "the characteristics". There is insufficient

antecedent basis for this limitation in the claim.

143.   Claim 70 recites the limitation "the measurements". There is insufficient

antecedent basis for this limitation in the claim.

144.   Claim 70 recites the limitation "the contextual information". There is insufficient

antecedent basis for this limitation in the claim.

145.   Claim 70 recites the limitation "the measurements". There is insufficient

antecedent basis for this limitation in the claim.

146.   Claim 70 recites the limitation "said measuring agents". There is insufficient

antecedent basis for this limitation in the claim.

147.   Claim 71 recites the limitation "the terminals". There is insufficient antecedent

basis for this limitation in the claim.

148.   Claim 71 recites the limitation "the identifying characteristics". There is

insufficient antecedent basis for this limitation in the claim.

149.   Claim 71 recites the limitation "the measurement campaign". There is insufficient

antecedent basis for this limitation in the claim.

150.   Claim 71 recites the limitation "said terminals". There is insufficient antecedent

basis for this limitation in the claim.

151.   Claim 71 recites the limitation "said measurements". There is insufficient

antecedent basis for this limitation in the claim.

152.   Claim 71 recites the limitation "the campaign". There is insufficient antecedent basis for this limitation in the claim.

153.   Claim 71 recites the limitation "the involved terminals". There is insufficient antecedent basis for this limitation in the claim.

154.   Claim 71 recites the limitation "the measurement information collected". There is insufficient antecedent basis for this limitation in the claim.

155.   Claim 71 recites the limitation "the relevant characteristics". There is insufficient antecedent basis for this limitation in the claim.

156.   Claim 71 recites the limitation "the purposes". There is insufficient antecedent basis for this limitation in the claim.

157.   Claim 71 recites the limitation "the measurement". There is insufficient antecedent basis for this limitation in the claim.

158.   Claim 71 recites the limitation "said terminals and related information". There is insufficient antecedent basis for this limitation in the claim.

159.   Claim 71 recites the limitation "the purpose of a determined measurement campaign". There is insufficient antecedent basis for this limitation in the claim.

160.   Claim 72 recites the limitation "the network". There is insufficient antecedent basis for this limitation in the claim.

161.   Claim 74 recites the limitation "the memory". There is insufficient antecedent basis for this limitation in the claim.

Applicant is made aware that there are other insufficient antecedent basis 35 USC 112

rejections. For the purpose of examination 161 examples of such antecedent basis

rejections for claims 38-74 have been presented since providing all 35 USC 112

antecedent basis rejections would result in undue burden on the examiner.

Claim Rejections - 35 USC § 101

162.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 74 lacks the proper form for a claim directed to computer/machine

readable instructions.

To be statutory claims directed to computer/machine readable instructions must

be embodied on a computer readable medium encoded with a process or data structure

usable by a computer. A Machine-readable medium is not acceptable. For the claim to

be statutory the preamble of the claim must define a structural and functional

interrelationship between the process or data structure and computer software and

hardware components. As a result, the preamble of the claim must define a process or

data structure as a computer readable medium embodying the process or data

structure. Further, the computer readable medium cannot be any type of signal as

defined by the specification or claim itself.

Examples of acceptable language in computer-processing related claims :

1.   "computer readable medium" encoded with ____(Options Below)____
        [a] "a computer program"
        [b] "software"
        [c] "computer executable instructions"
        [d] "instructions capable of being executed by a computer"

2.   "a computer readable medium" __(Options below)_____ "computer program"
        [a] storing a
        [b] embodied with a
        [c] encoded with a
        [d] having a stored
        [e] having an encoded

Correction is required.

Claim Rejections - 35 USC § 103

163.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

164.   Claims **38-50**, **52-67**, and **69-74** rejected under 35 U.S.C. 103(a) as being

unpatentable **Menon (US 2001/0001268)** in view of **Korhonan (EP 1 304 831 A2)**

Menon discloses:

Regarding claim 38, architecture **(see Menon; figure 1; "SMP" and "75")**

for monitoring quality of service **(see Menon; paragraph 0182; "The subscriber**

management procedure 160 generates and supports network management

access to subscriber information including, but not limited to, subscriber

profiles, subscription activity and subscriber account balances. In an

embodiment, subscription profiles include, but are not limited to, customer

identification, customer service support requests and the Quality of

Service (QoS) subscribed for, or otherwise assigned. In an embodiment,

subscription activity information includes, but is not limited to, respective

subscribers' usage, in time, of service supported by the wireless access

system 10, or 100.") in a telecommunication network **(see Menon; abstract;**

"telecommunications network") comprising: a set of terminals **(see Menon;**

abstract; "a base station which provides wireless access for CPRUs" which

are terminals; figure 16; multiple "Customer Premise Radio Units") housing

measuring agents **(see Menon; paragraph 0185; "Each node manager 854, in**

turn, manages two or more network nodes 856. The network nodes 856

comprise the CPRUs 25, base stations 30, ... "; figure 13; "Node (agent)"

houses "SMP" which is the "subscriber management procedure 160

generates and supports network management access to subscriber

information including, but not limited to, subscriber profiles ...

subscription profiles include, but are not limited to, customer identification,

customer service support requests and the Quality of Service (QoS)

subscribed for, or otherwise assigned.") which <u>can be</u> configured <u>to interface</u>

<u>with applications</u> **(see Menon; paragraph 0168; "the NNM platform 114**

provides standard APIs (Application Platform Interfaces) which allow

attachment of third party applications ... for purposes including, but not

limited to, trouble-shooting and error management, asset management and

system, service and functionality analysis"; paragraph 0188; "sports the

application functionality for network node management, including, but not

limited to, configuration management, fault management, performance

management, accounting management and security management.

Likewise, the agent applications layer 841 of the node element protocol

stack 840 supports the application functionality for network node

management, including, but not limited to, configuration management, fault

management, performance management, accounting management and

security management.") and a management and configuration subsystem **(see**

Menon; figure 9; "depicts management platforms within the management

structure"; paragraph 0160; "network management"; paragraph 0146;

"accounting management") comprising a scheduling module **(see Menon;**

paragraph 0170; paragraph 0169; "subscriber registration module") for

scheduling quality of service measuring campaigns **(see Menon; paragraph**

0170; "subscriber registration procedure 152 includes … collection,

storage, and management of subscriber, i.e. customer, data … subscriber

data includes, but is not limited to, a subscriber profile ... example of a

parameter associated with a subscriber profile is a Quality of Service

(QoS) level subscribed for, or otherwise assigned"; paragraph 0227;

"perform a measurement collection functionality … measurement

collection functionality includes, but is not limited to, a determination of

the uplink quality and signal strength to each base station … the

availability and usage of base station's over-the-air resources"), **capable of**

(see 35 U.S.C. 112 2nd paragraph rejection) involving respective sub-sets of

said set of terminals according to a set of identifying characteristics of the

measuring campaign, said scheduling module **being able to (see 35 U.S.C. 112**

2nd paragraph rejection) configure, for the purposes of the execution of said

measuring campaigns, the measuring agents housed by the terminals included in

said related sub-sets according to said set of identifying characteristics.

Regarding claim 39, the architecture, wherein an additional subsystem is

provided for managing the collection of measurement data **(see Menon; figure**

9; paragraph 0167; "The network management layer 130 comprises a

Network Node Management platform 114 for providing centralized network

node management"), said additional subsystem **(see Menon; figure 9;**

paragraph 0167; "network management layer 130") comprising at least one of

a database **(see Menon; paragraph 0167; "database")** for storing said

measurement data and of a processing centre for processing said measurement

data **(see Menon; paragraph 0167; "The NNM platform 114 provides**

standard network management functionality, including, but not limited to,

configuration management, fault statusing and provisioning"; paragraph

185; "the manager of managers 852 is the Network Node Management

(NNM) platform 114. The manager of managers 852 manages two or more

node managers 854.").

Regarding claim 40, the architecture, wherein said measuring agents

housed by the terminals **(see Menon; figure 13; "Node (agent)" containing**

"SNMP" and "Agent applications") of said set are configured to dialogue with

homologous measurement **(i.e. of similar or same structure of same origin;**

see Menon; figure 12; figure 13; dialogue between "Agent" and "Manager"

thus using homologous measurement) and management agents **(see Menon;**

figure 12; "Nodes A-H" dialogue with "Node Manager" dialogue with

"Manager of managers"; figure 13; "Network Manager" dialogues with

"Node (agent)").

Regarding claim 41, the architecture, wherein at least <u>some of</u> the

terminals of said set are mobile terminals **(see Menon; paragraph 0027; "FIG.**

13 depicts a generic management protocol architecture protocol for

management of a network node in a wireless access network").

Regarding claim 42, The architecture, wherein said measuring agents are

configured to <u>**perform operations selected from the group of**</u>: conducting co-

ordinated measurements on said telecommunication network **(see Menon;**

paragraph 0227; "base station 30 of the wireless access system 10 or a

base station 101 of the wireless access system 100 is operational, it

performs a measurement collection functionality", thus a coordinated

measurement), performing local storage and pre-processing operations

according to the processing conditions of said network, and managing the

transfer **(see Menon; paragraph 0228; "results, are reported to the wireless**

access system") of the measurement results **(see Menon; paragraph 0228;**

"results") to said at least an additional subsystem for managing the collection of

the measurement data **(see Menon; paragraph 0228; "base stations'**

measured, and/or collected values, or results, are reported to the wireless

access system 10 or 100, based on network configurable reporting period.

Any base station 30 and 1010 may also be requested by the respective

system 10 or 100 to cease measurement value reporting.").

Regarding claim 43, the architecture, wherein said measuring agents are configured to **conduct measurements selected from the group of**: measuring **(see Menon; paragraph 0227; "measurement collection functionality")** the quality and operating conditions of the radio access referred to said terminals, monitoring end-to-end transport performance in real traffic **(see Menon; paragraph 0226; "Each CPRU 25, WARP 32 and base station 30 and 101 in wireless access systems 10 and 100 supports self-supervision functionality to detect failures due to equipment, processing, communications, quality of service and environmental conditions"; paragraph 0228; "measurement collection functionality includes, but is not limited to, a determination of the uplink radio quality and signal strength on each base station 30 or 101 for all used, i.e., busy over-the-air channels, the signal strength on idle, i.e., not user, over-the-air channels, the success rate of over-the-air interface procedures, and the availability and usage of the base station's over-the-air resources.")**, monitoring end-to-end transport performance in artificial traffic, measurements and processing on said terminals to produce quality of service indicators at the application layer, and monitoring the operating conditions of the resources of said terminals and of said network **(see Menon; paragraph 0219; "CPRUs 25, WARPs 32 and base stations 30 and 101 of wireless access systems 10 and 100 status their own hardware resources to the respective Operation and Maintenance Center (OMC) 72, including, but not limited to, a unique resource description that identifies the respective resource, i.e.,**

the resource type, the version of the particular resource type, and the

location of the resource. The hardware resource information of a respective

CPRU 25, WARP 32 or base station 30 or 101 is provided to the system's

OMC 72 upon the respective CPRU's, WARP's or base station's power on or

reset. The hardware resource information of a respective CPRU 25, WARP

32 or base station 30 or 101 is also provided to the OMC 72 as part of a

hardware failure status report").

Regarding claim 44, the architecture, wherein said measuring agents are

configured to measure **(see Menon; paragraph 0170; "collection, storage,**

and management of subscribers") the load state of the terminal **(see Menon;**

paragraph 0182; "subscriber activity information includes, but is not

limited to, respective subscribers' usage, in time, of services supported by

the wireless access system 10, or 100 ... ") and/or of the network and to adapt

the monitoring to the load state measured **(see Menon; paragraph 0370; "an**

adaptation function is used by both CPRUs 25 and WARPs, for

coordinating, or otherwise interworking, between H.323 voice/fax signaling

and the GSM-managed circuit signaling procedures").

Regarding claim 45, the architecture, wherein said management and

configuration subsystem comprises at least a respective communication agent

(see Menon; figure 13; "Node (agent)") capable of **(see 35 U.S.C. 112 2nd**

paragraph rejection) interfacing with respective communication agents

associated with said measuring agents housed by the terminals of said set.

Regarding claim 46, the architecture, wherein said management and

configuration subsystem comprises at least one respective communication agent

(see Menon; figure 13; "Node (agent)") <u>capable of</u> **(see 35 U.S.C. 112 2nd**

paragraph rejection) interfacing with one homologous communication agent

comprised in said additional subsystem for managing the collection of the

measurement data.

Regarding claim 47, the architecture, wherein said management and

configuration subsystem comprise an interface for interfacing with a user **(see**

Menon; paragraph 0199; "the OMC management platform 992 comprises a

Graphical User Interface (GUI) 993 for operator interaction in the network

management functionality.").

Regarding claim 48, the architecture, wherein said additional subsystem

for managing the collection of the measurement data comprises a respective

communication agent **(see Menon; figure 13; "Node Manager")** configured to

communicate **(see Menon; figure 13; "Remote or local connection")** with

respective communication agents **(see Menon; figure 13; "Agent Application")**

associated with said measuring agents **(see Menon; figure 13; "Agent**

Application" associated with "Node") housed by the terminals **(see Menon;**

figure 13; "Node (Agent)") of said set **(see Menon; figure 12)**.

Regarding claim 49, the architecture, wherein said additional subsystem

for managing the collection of the measurement data comprises a respective

interface for interfacing said architecture with external systems **(see Menon;**

figure 9; a layered architecture. Architecture contains "Network Layer

Management", "Subscriber Management Platform", "Gateway

Management", "Router Management", and other external "management"

that manages and collects data.).

Regarding claim 50, the architecture, wherein said measuring agents

housed by the terminals of said set are configured for the direct transfer **(see**

Menon; paragraph 0228; "results, are reported to the wireless access

system") of said measurement data **(see Menon; paragraph 0228; "results")**

to said additional sub-system for managing the collection of the measurement

data **(see Menon; paragraph 0228; "base stations' measured, and/or**

collected values, or results, are reported to the wireless access system 10

or 100, based on network configurable reporting period. Any base station

30 and 1010 may also be requested by the respective system 10 or 100 to

cease measurement value reporting.").

Regarding claim 52, the architecture, wherein said measuring agents

dialogue with said homologous agents with a communication resource **selected**

from the group of: information transport by means of SMS, TCP/IP transport

(see Menon; figure 13; "TCP" and "IP" with "Remote or local connection"),

and UDP/IP transport **(see Menon; figure 13; "UDP" and "IP" with "Remote**

or local connection").

Regarding claim 53, the architecture, wherein said scheduling module is

configured to perform **at least one** operation selected from the group of: defining

the identifying characteristics of a measurement campaign, identifying the

terminals to be subjected to said campaign **(see Menon; paragraph 0143;**

"subscriber profile comprises a respective subscriber identification, the

subscribed for network services and an assigned Quality of Service (QoS)

level"; paragraph 0170; "subscriber registration procedure 152 includes ...

the subscriber data includes, but is not limited to, a subscriber profile ... an

example of a parameter associated with a subscriber profile is a Quality of

Service (QoS) level subscriber for"), defining the measurements to be made

and the quality of service indicators to be obtained, defining the characteristics of

the measurements to be made, and defining the contextual information

associated with the measurements carried out by said measuring agents.

Regarding claim 54, the architecture, wherein, in order to identify said

respective sub-sets of said set of terminals, said scheduling module is configured

to **carry out operations** selected from the group of: continuous search for the

terminals meeting the identifying characteristics of the measurement campaign,

recording said terminals on an internal database, creating a measurement profile

with the information for conducting said measurements by a respective

measuring agent, activating the campaign on the involved terminals, sending

(see Menon; paragraph 0228; "results, are reported to the wireless access

system") the measurement information **(see Menon; paragraph 0228;**

"results") collected from said terminals **(see Menon; paragraph 0228; "base**

stations' measured, and/or collected values, or results, are reported to the

wireless access system 10 or 100, based on network configurable reporting

period. Any base station 30 and 1010 may also be requested by the

respective system 10 or 100 to cease measurement value reporting."),

identifying the terminals subjected to changes of the relevant characteristics for

the purposes of the measurement, deactivating the campaign **(see Menon;**

paragraph 0228; "Further, any base stations 30 or 101 that was previously

requested by the respective system 10 or 100 to cease measurement value

reporting" thus deactivate the campaign), and deleting measurement profiles

from said terminals and related information for the purpose of a determined

measurement campaign.

Menon does not specifically disclose:

Regarding claim 38, interface with processes selected among processes

for managing the application sessions of said network and processes for

measuring the operating conditions of the network itself;

Korhonan more specifically discloses:

Regarding claim 38, interface with processes **(see Korhonan; paragraph**

0033; "IP Communication") selected among processes **(see Korhonan;**

paragraph 0033; "TCP/IP, TCP, Transmission Control Protocol, UDP/IP;

UDP, user Datagram Protocol, Internet Control Message Protocol (ICMP)")

for managing the application sessions **(see Korhonan; paragraph 0033;**

"TCP/IP" is used to manage and establish application sessions) of said

network **(see Korhonan; paragraph 033; "QoS" and "message" thus of a**

network) and processes for measuring **(see Korhonan; paragraph 0021; "first of which is to pro-process and refine QoS data into a form suited for applications")** the operating conditions of the network itself **(see Korhonan; paragraph 0021; "activities include e.g. the calculation of transfer rate, standard deviations and calculation of percentages e.g. in loss of packets")**;

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Menon**, as taught by **Korhonan**, thereby overcoming or alleviating drawbacks such as: being unable to guarantee a certain level of quality or service (QoS) **(see Korhonan; paragraph 0003)**, the problem of the level of quality of data transfer varying considerably depending on location, time and network load **(see Korhonan; paragraph 0003)**, and not being able to provide a guarantee of packets reaching their destination as IP-based packet switched network are basically "best effort" network and packets are transmitted to their destination within the limits allowed by the network **(see Korhonan; paragraph 0004)**.

Menon discloses:

Regarding claim 55, a method **(see Menon; figure 1; "SMP" and "75"; paragraph 0182; "procedure")** for monitoring quality of service **(see Menon; paragraph 0182; "The subscriber management procedure 160 generates**

and supports network management access to subscriber information

including, but not limited to, subscriber profiles, subscription activity and

subscriber account balances. In an embodiment, subscription profiles

include, but are not limited to, customer identification, customer service

support requests and the Quality of Service (QoS) subscribed for, or

otherwise assigned. In an embodiment, subscription activity information

includes, but is not limited to, respective subscribers' usage, in time, of

service supported by the wireless access system 10, or 100.")** in a

telecommunication network comprising a set of terminals **(see Menon; abstract;

"telecommunications network")** comprising the steps of: associating to the

terminals **(see Menon; abstract; "a base station which provides wireless

access for CPRUs" which are terminals; figure 16; multiple "Customer

Premise Radio Units")** of said set measuring agents **(see Menon; paragraph

0185; "Each node manager 854, in turn, manages two or more network

nodes 856. The network nodes 856 comprise the CPRUs 25, base stations

30, ... "; figure 13; "Node (agent)" houses "SMP" which is the "subscriber

management procedure 160 generates and supports network management

access to subscriber information including, but not limited to, subscriber

profiles ... subscription profiles include, but are not limited to, customer

identification, customer service support requests and the Quality of

Service (QoS) subscribed for, or otherwise assigned.")** which <u>can be</u>

configured to interface with applications **(see Menon; paragraph 0168; "the

NNM platform 114 provides standard APIs (Application Platform Interfaces)

which allow attachment of third party applications ... for purposes

including, but not limited to, trouble-shooting and error management, asset

management and system, service and functionality analysis"; paragraph

0188; "sports the application functionality for network node management,

including, but not limited to, configuration management, fault management,

performance management, accounting management and security

management. Likewise, the agent applications layer 841 of the node

element protocol stack 840 supports the application functionality for

network node management, including, but not limited to, configuration

management, fault management, performance management, accounting

management and security management.") and conducting quality of service

measuring campaigns (see Menon; paragraph 0170; "subscriber registration

procedure 152 includes ... collection, storage, and management of

subscriber, i.e. customer, data ... subscriber data includes, but is not

limited to, a subscriber profile ... example of a parameter associated with a

subscriber profile is a Quality of Service (QoS) level subscribed for, or

otherwise assigned"; paragraph 0227; "perform a measurement collection

functionality ... measurement collection functionality includes, but is not

limited to, a determination of the uplink quality and signal strength to each

base station ... the availability and usage of base station's over-the-air

resources"), capable of (see 35 U.S.C. 112 2nd paragraph rejection) involving

respective sub-sets of said set of terminals according to a set of identifying

characteristics of the measuring campaign configuring, for the purposes of the

execution of said measuring campaigns, the measuring agents associated with

the terminals included in said respective sub-sets according to said set of

identifying characteristics.

Regarding claim 56, the method as claimed in claim 55, comprising the

step of managing the collection of measurement data **(see Menon; figure 9;**

paragraph 0167; "The network management layer 130 comprises a Network

Node Management platform 114 for providing centralized network node

management") and providing at least one of a database **(see Menon;**

paragraph 0167; "database") for storing said measurement data and a

processing centre for processing said measurement data **(see Menon;**

paragraph 0167; "The NNM platform 114 provides standard network

management functionality, including, but not limited to, configuration

management, fault statusing and provisioning"; paragraph 185; "the

manager of managers 852 is the Network Node Management (NNM)

platform 114. The manager of managers 852 manages two or more node

managers 854.").

Regarding claim 57, the method as claimed in claim 55, comprising the

step of configuring said measuring agents associated with the terminals **(see**

Menon; figure 13; "Node (agent)" containing "SNMP" and "Agent

applications") of said set to dialogue with homologous measurement **(i.e. of**

similar or same structure of same origin; see Menon; figure 12; figure 13;

dialogue between "Agent" and "Manager" thus using homologous

measurement) and management agents **(see Menon; figure 12; "Nodes A-H"**

dialogue with "Node Manager" dialogue with "Manager of managers";

figure 13; "Network Manager" dialogues with "Node (agent)").

Regarding claim 58, the method as claimed in claim 55, comprising the

step of selecting at least **some of** the terminals of said set as mobile terminals

(see Menon; paragraph 0027; "FIG. 13 depicts a generic management

protocol architecture protocol for management of a network node in a

wireless access network").

Regarding claim 59, the method, comprising the step of configuring

said measuring agents to **perform steps selected from the group of**:

conducting co-ordinated measurements on said telecommunication network **(see**

Menon; paragraph 0227; "base station 30 of the wireless access system 10

or a base station 101 of the wireless access system 100 is operational, it

performs a measurement collection functionality", thus a coordinated

measurement), performing local storage and pre-processing operations

according to the processing conditions of said network, and managing the

transfer **(see Menon; paragraph 0228; "results, are reported to the wireless**

access system") of the measurement results **(see Menon; paragraph 0228;**

"results") to said at least an additional sub-system for managing the collection

of the measurement data **(see Menon; paragraph 0228; "base stations'**

measured, and/or collected values, or results, are reported to the wireless

access system 10 or 100, based on network configurable reporting period.

Any base station 30 and 1010 may also be requested by the respective

system 10 or 100 to cease measurement value reporting.").

Regarding claim 60, the method, comprising the step of configuring said

measuring agents to **conduct measurements selected from the group of**:

measuring **(see Menon; paragraph 0227; "measurement collection**

functionality") the quality and operating conditions of the radio access referred

to said terminals **(see Menon; paragraph 0226; "Each CPRU 25, WARP 32**

and base station 30 and 101 in wireless access systems 10 and 100

supports self-supervision functionality to detect failures due to equipment,

processing, communications, quality of service and environmental

conditions"; paragraph 0228; "measurement collection functionality

includes, but is not limited to, a determination of the uplink radio quality

and signal strength on each base station 30 or 101 for all used, i.e., busy

over-the-air channels, the signal strength on idle, i.e., not user, over-the-air

channels, the success rate of over-the-air interface procedures, and the

availability and usage of the base station's over-the-air resources."),

monitoring end-to-end transport performance in real traffic, monitoring end-to-end

transport performance in artificial traffic, measuring and processing on said

terminals for the production of quality of service indicators at the application

layer, and monitoring the operating conditions of the resources of said terminals

and of said network **(see Menon; paragraph 0219; "CPRUs 25, WARPs 32 and base stations 30 and 101 of wireless access systems 10 and 100 status their own hardware resources to the respective Operation and Maintenance Center (OMC) 72, including, but not limited to, a unique resource description that identifies the respective resource, i.e., the resource type, the version of the particular resource type, and the location of the resource. The hardware resource information of a respective CPRU 25, WARP 32 or base station 30 or 101 is provided to the system's OMC 72 upon the respective CPRU's, WARP's or base station's power on or reset. The hardware resource information of a respective CPRU 25, WARP 32 or base station 30 or 101 is also provided to the OMC 72 as part of a hardware failure status report")**.

Regarding claim 61, the method, comprising the steps of: measuring **(see Menon; paragraph 0170; "collection, storage, and management of subscribers")**, by means of said measuring agents, the load state of the terminal **(see Menon; paragraph 0182; "subscriber activity information includes, but is not limited to, respective subscribers' usage, in time, of services supported by the wireless access system 10, or 100 ... ")** <u>and/or</u> of the network, and adapting the monitoring to the measured load state **(see Menon; paragraph 0370; "an adaptation function is used by both CPRUs 25 and WARPs, for coordinating, or otherwise interworking, between H.323 voice/fax signaling and the GSM-managed circuit signaling procedures")**.

Regarding claim 62, the method, comprising the step of providing a sub-system for the management and configuration of the measurement campaigns **capable of (see 35 U.S.C. 112 2nd paragraph rejection)** interfacing with said measuring agents housed by the terminals of said set.

Regarding claim 63, the method, comprising the steps of: providing a sub-system for the management and configuration of the measurement campaigns, and providing an additional sub-system for managing the collection of the measurement data **capable of (see 35 U.S.C. 112 2nd paragraph rejection)** interfacing with said sub-system for the management and configuration of the measurement campaigns.

Regarding claim 64, the method, comprising the step of providing a sub-system for the management and configuration of the measurement campaigns **capable of (see 35 U.S.C. 112 2nd paragraph rejection)** interfacing with a user **(see Menon; paragraph 0199; "the OMC management platform 992 comprises a Graphical User Interface (GUI) 993 for operator interaction in the network management functionality.")**.

Regarding claim 65, the method, comprising the step of providing an additional sub-system for managing the collection of the measurement data configured to communicate **(see Menon; figure 13; "Remote or local connection")** with said measuring agents **(see Menon; figure 13; "Agent Application")** associated with the terminals **(see Menon; figure 13; "Node (Agent)")** of said set **(see Menon; figure 12)**.

Regarding claim 66, the method, comprising the step of providing an

additional sub-system for managing the collection of the measurement data

configured for interfacing with external systems **(see Menon; figure 9; a layered**

architecture. Architecture contains "Network Layer Management",

"Subscriber Management Platform", "Gateway Management", "Router

Management", and other external "management" that manages and

collects data.).

Regarding claim 67, the method, comprising the steps of: providing

additional sub-system for managing the collection of the measurement data, and

configuring said measuring agents associated with the terminals of said set for

the direct transfer **(see Menon; paragraph 0228; "results, are reported to the**

wireless access system") of said measurement data **(see Menon; paragraph**

0228; "results") to said additional sub-system for managing the collection of the

measurement data **(see Menon; paragraph 0228; "base stations' measured,**

and/or collected values, or results, are reported to the wireless access

system 10 or 100, based on network configurable reporting period. Any

base station 30 and 1010 may also be requested by the respective system

10 or 100 to cease measurement value reporting.").

Regarding claim 69, the method, comprising the step of configuring said

measuring agents for dialoguing with said homologous agents with a

communication resource **selected from the group of information transport by**

means of SMS, TCP/IP transport **(see Menon; figure 13; "TCP" and "IP" with**

"Remote or local connection"), and UDP/IP transport **(see Menon; figure 13;**

"UDP" and "IP" with "Remote or local connection").

Regarding claim 70, the method, wherein the step of conducting said

measurement campaigns in turn comprises **at least a step** selected from the

group of: defining the identifying characteristics of a measurement campaign,

identifying the terminals to be subjected to said campaign **(see Menon;**

paragraph 0143; "subscriber profile comprises a respective subscriber

identification, the subscribed for network services and an assigned Quality

of Service (QoS) level"; paragraph 0170; "subscriber registration procedure

152 includes … the subscriber data includes, but is not limited to, a

subscriber profile ... an example of a parameter associated with a

subscriber profile is a Quality of Service (QoS) level subscriber for"),

defining the measurements to be made and the quality of service indicators to be

obtained, defining the characteristics of the measurements to be made, and

defining the contextual information associated with the measurements carried out

by said measuring agents.

Regarding claim 71, the method, wherein, in order to identify said

respective sub-sets of said set of terminals, **comprising steps selected from**

the group of: continuously searching for the terminals meeting the identifying

characteristics of the measurement campaign, recording said terminals on an

internal database, creating a measurement profile with the information for

conducting said measurements by a respective measuring agent, activating the

campaign on the involved terminals, sending **(see Menon; paragraph 0228;**

"results, are reported to the wireless access system") the measurement

information **(see Menon; paragraph 0228; "results")** collected from said

terminals **(see Menon; paragraph 0228; "base stations' measured, and/or**

collected values, or results, are reported to the wireless access system 10

or 100, based on network configurable reporting period. Any base station

30 and 1010 may also be requested by the respective system 10 or 100 to

cease measurement value reporting."), identifying the terminals subjected to

changes of the relevant characteristics for the purposes of the measurement,

deactivating the campaign **(see Menon; paragraph 0228; "Further, any base**

stations 30 or 101 that was previously requested by the respective system

10 or 100 to cease measurement value reporting" thus deactivate the

campaign), and deleting measurement profiles from said terminals and related

information for the purpose of a determined measurement campaign.

Regarding claim 72, a telecommunication network **(see Menon; figure 1;**

"network") comprising, monitoring architecture **(see Menon; figure 9; "item**

"110" is the "management" architecture for "monitoring") as claimed in

claim 38, and associated with the network itself **(see Menon; figure 9; "item**

"110" is associated with "network").

Regarding claim 73, the telecommunication network, comprising at least

an application server housing at least a measuring agent **(see Menon; figure 13;**

"agent application" and "node (agent)") <u>capable of</u> (see 35 U.S.C. 112 2nd

paragraph rejection) interacting with said monitoring architecture.

Regarding claim 74, a computer program product **(see Menon; figure 13;**

"application", thus instructions embedded on a computer readable

medium) <u>capable of</u> **(see 35 U.S.C. 112 2nd paragraph rejection)** being loaded

into the memory of at least one electronic computer and comprising portions of

software code for implementing the architecture as claimed in any one of claims

38-54 or the method as claimed in any one of claims 55-71.

Menon does not specifically disclose**:**

Regarding claim 55, interface with processes selected among processes

for managing the application sessions of said network and processes for

measuring the operating conditions of the network itself.

Korhonan more specifically discloses**:**

Regarding claim 55, interface with processes **(see Korhonan; paragraph**

0033; "IP Communication") selected among processes **(see Korhonan;**

paragraph 0033; "TCP/IP, TCP, Transmission Control Protocol, UDP/IP;

UDP, user Datagram Protocol, Internet Control Message Protocol (ICMP)")

for managing the application sessions **(see Korhonan; paragraph 0033;**

"TCP/IP" is used to manage and establish application sessions) of said

network **(see Korhonan; paragraph 033; "QoS" and "message" thus of a**

network) and processes for measuring **(see Korhonan; paragraph 0021; "first**

of which is to pro-process and refine QoS data into a form suited for

applications") the operating conditions of the network itself **(see Korhonan; paragraph 0021; "activities include e.g. the calculation of transfer rate, standard deviations and calculation of percentages e.g. in loss of packets")**,

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Menon**, as taught by **Korhonan**, thereby overcoming or alleviating drawbacks such as: being unable to guarantee a certain level of quality or service (QoS) **(see Korhonan; paragraph 0003)**, the problem of the level of quality of data transfer varying considerably depending on location, time and network load **(see Korhonan; paragraph 0003)**, and not being able to provide a guarantee of packets reaching their destination as IP-based packet switched network are basically "best effort" network and packets are transmitted to their destination within the limits allowed by the network **(see Korhonan; paragraph 0004)**.

165.   Claims **51** and **68** rejected under 35 U.S.C. 103(a) as being unpatentable over

Menon (US 2001/0001268) in view of **Korhonan (EP 1 304 831 A2)**, and further in view

of **Bellifemine ("JADE: <u>J</u>ava <u>A</u>gent <u>D</u>evelopment <u>F</u>ramework")**.

Menon in view of Korhonan disclose:

Regarding claim 51, the architecture **(see Menon; figure 1; "SMP" and**

"75"; figure 9).

Regarding claim 55, the method **(see Menon; figure 1; "SMP" and "75";**

paragraph 0182; "procedure").

Menon in view of Korhonan do not specifically disclose:

Regarding claim 51, the architecture, wherein said measuring agents

operate according to Jade technology.

Regarding claim 68, the method, wherein said measuring agents operate

according to Jade technology.

Bellifemine more specifically discloses:

Regarding claim 51, the architecture, wherein said measuring agents **(see**

Bellifemine; slide 3; "Agent") operate according to Jade technology **(see**

Bellifemine; slide 1; "JADE: Java Agent Development Framework"; slide 5

"FIPA: Conceptual Model of an Agent Platform"; "Agent Platform" for

"Services").

Regarding claim 68, the method, wherein said measuring agents **(see Bellifemine; slide 3; "Agent")** operate according to Jade technology **(see Bellifemine; slide 1; "JADE: Java Agent Development Framework"; slide 5 "FIPA: Conceptual Model of an Agent Platform"; "Agent Platform" for "Services")**.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of **Menon in view of Korhonan**, as taught by **Bellifemine**, thereby using a standard thus allowing for the enabling factor for openness and heterogeneity **(see Bellifemine; slide 3)**; allowing for agents from several designers, several vendors, or several organizations **(see Bellifemine; slide 3)**; providing a standard way of interpreting communication between agents that respect the intended meaning of the communication **(see Bellifemine; slide 4)**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM DUDA whose telephone number is (571)270-5136. The examiner can normally be reached on Mon. - Fri. 9:30 a.m. - 7:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272 - 3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ADAM DUDA/
Examiner, Art Unit 2416

/Kwang B. Yao/
Supervisory Patent Examiner, Art Unit 2416